

## **Synthesis of an Organic-Inorganic Salt of 12-Silicotungstate, (C<sub>2</sub>H<sub>5</sub>NO<sub>2</sub>)<sub>2</sub>H<sub>4</sub>SiW<sub>12</sub>O<sub>40</sub> and Investigation of Its Anti-Viral Effect on the Tobacco Mosaic Virus**

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**Abstract :** Polyoxometalates (POMs) are important inorganic compounds that have been considered specifically in recent years due to abundant attributes and applications. Those POMs that have one central tetrahedral atom called keggin. The binding Amino-acid groups to keggin structure give the antiviral effect to these compounds. A new organic-inorganic hybrid structure, with formula (Gly)<sub>2</sub>H<sub>4</sub>SiW<sub>12</sub>O<sub>40</sub>, was synthesized. Investigation on the anti-viral effect of this compound showed the (Gly)<sub>2</sub>H<sub>4</sub>SiW<sub>12</sub>O<sub>40</sub> prevents infection of Tobacco Mosaic Virus (TMV) on the Nicotianatabacum plants.

**Keywords :** polyoxometalate, keggin, organic-inorganic salt, TMV

**Conference Title :** ICSR 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020